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Federal Communications Commission RECE/VED

In the Matter of)	OFFICE OMMUNICATION
Amendment of the Commission's Rules to Establish New Personal)	GEN Docket No. 90-314 SCRETARY
Communications Services)	RM-7140, RM-7175, RM-7618

To: The Commission

REPLY OF TRW INC.

TRW Inc. ("TRW"), by its attorneys and pursuant to Section 1.429 of the Commission's Rules (see 47 C.F.R. § 1.429 (1992)), hereby replies to the oppositions filed in response to TRW's Petition for Partial Reconsideration of the Commission's Second Report and Order in the above-captioned proceeding. See Amendment of the Commission's Rules to Establish New Personal Communications Services (Second Report and Order), FCC 93-451 (released October 22, 1993) ("Second Report & Order"). $\frac{1}{}$ As shown below, none of the parties addressing TRW's Petition accurately grasped the nature of TRW's request. As a result, TRW's Petition, which was both limited in its scope and clear in its request for relief, is effectively unopposed. It should now be granted.

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^{1/} The deadline for submission of replies in this proceeding was extended by the Chief Engineer to January 13, 1994. See Order Denying Extension of Time, DA 93-1575, released December 29, 1993.

In its Petition, TRW urged the Commission to revisit its decision to allocate the spectrum between 2180-2200 MHz as part of terrestrial Personal Communications Service ("PCS") Frequency Blocks D through G. See Second Report & Order, FCC 93-451, slip op. at 26 (¶ 56). It contended that the Commission's allocation of this band to terrestrial PCS is inconsistent both with positions taken by the United States before the International Telecommunication Union ("ITU") and with the public interest in the United States in achieving a competitive global Mobile-Satellite Service ("MSS") industry. TRW also warned that failure to reconsider the terrestrial PCS allocation in the MSS bands at 2180-2200 MHz would undermine more than three years of U.S. efforts to secure sufficient spectrum for the MSS, and severely hamper the credibility of the United States Government as it seeks both to garner additional MSS allocations and to facilitate the introduction of MSS in existing allocations at future World Radiocommunication Conferences (beginning with the 1995 Conference). See TRW Petition at $7-11.\frac{2}{}$

Two other parties sought reconsideration of the 2180-2200 MHz allocation based on very similar arguments. See Petition for Reconsideration of AMSC Subsidiary Corporation (filed December 8, 1993; Petition for Partial Reconsideration of COMSAT Corporation (filed December 8, 1993).

TRW called upon the Commission to preserve the regional and global MSS allocations at 1970-2010 MHz and 2160-2200 MHz, ³/ and showed that this objective could be accomplished if the Commission were to find elsewhere twenty megahertz of contiguous spectrum, suitable for terrestrial PCS use, where the portions of Frequency Blocks D, E, F and G currently assigned at 2180-2200 MHz could be accommodated. TRW reported in its Petition that it had provisionally determined that if these four 10 megahertz frequency blocks are modified as follows, all of the MSS spectrum proposed for allocation in TRW's Petition for Rule Making would be free of terrestrial PCS use:

Frequency Block D - 2110-2115/2130-2135 MHz; Frequency Block E - 2115-2120/2135-2140 MHz; Frequency Block F - 2120-2125/2140-2145 MHz; and Frequency Block G - 2125-2130/2145-2150 MHz.

TRW Petition at 12-13. $^{4/}$ TRW was of the view that the Commission's scheme to license 120 MHz of spectrum to terrestrial

On the same date that it filed its Petition in this proceeding, TRW also filed a Petition for Rule Making affirmatively requesting that the Commission reallocate these bands domestically for the provision of MSS.

TRW noted that this modification would require a twenty megahertz downward shift of the front end of the allocation made in the Second Report & Order, and a fifty megahertz downward shift in the back end. Compare Second Report & Order, FCC 93-451, slip. op. at 26 (¶ 56). Although the frequency separation within each block would be reduced from fifty to twenty megahertz, TRW opined that the technical feasibility of terrestrial PCS operations in revised Frequency Blocks D, E, F and G would not be compromised.

PCS would not be compromised by the adoption of the changes that TRW proposed. <u>Id.</u>

Only five of the many parties opposing or commenting on the numerous petitions for reconsideration that were filed in this proceeding addressed TRW's Petition in any fashion. All of these parties treat TRW's Petition as if it merely sought a reduction in the amount of PCS spectrum, ignoring its proposal for alternative PCS spectrum in the two gigahertz bands, which would maintain the full 120 MHz allocation for terrestrial broadband PCS. No party has advanced any reason -- based on policy, technical compatibility, or any other consideration -- why TRW's alternative allocation scheme cannot be implemented.

Conversely, there are strong economic and policy reasons to adopt the relatively minor change that TRW proposes.

As TRW pointed out in its Petition, the 2180-2200 MHz band is two thirds of the downlink spectrum that is available across all three ITU regions for the implementation of global mobile satellite services. See TRW Petition at 6-7. Although some of

See Statement of Partial Support and Partial Opposition of the American Petroleum Institute at 8 ("API Opposition"); Opposition of Bell Atlantic Personal Communications, Inc. at 8-10 ("Bell Atlantic Opposition"); MCI Opposition at 6; Opposition of Sprint Corporation at 5-6 ("Sprint Opposition"); Comments of the Utilities Telecommunications Council at 6-8.

those opposing TRW maintain that the left-over 1970-1990 MHz and 2160-2180 MHz bands are a sufficient reserve for MSS, not one provides any support for this assertion. 6/ In particular, no party even addresses the fact that fully half of this remaining spectrum is available for MSS only in ITU Region 2 (the Americas), and is therefore not sufficient for use by inherently worldwide systems of the types being proposed by many current MSS proponents.

Similarly, no party addresses the inherent inconsistency of allocating the 2180 to 2200 MHz band to PCS after the United States played a leading advocacy role at WARC-92 in securing this spectrum for worldwide MSS systems. To the extent that it would be possible at all, securing alternative spectrum for global MSS through international fora would be time consuming, difficult, and likely to require compromise on other issues affecting U.S. interests. Failure to preserve this hardwon allocation for such services may very well leave insufficient spectrum to accommodate multiple international MSS service providers, without the prospect of alternate frequencies becoming available. In addition, failure to resolve the current

<u>See API Opposition at 8; Bell Atlantic Opposition at 9; Sprint Opposition at 6.</u>

inconsistency between the United States' domestic regulatory policy and its prior positions before the ITU could have a long-term negative effect on U.S. credibility concerning other matters before the ITU.

Fortunately, it is far easier for the Commission to find twenty megahertz of alternate PCS spectrum than it would be to initiate the laborious international process of seeking replacement frequencies for MSS across all of the ITU regions. TRW has identified other spectrum within the bands proposed by the Commission for development of emerging technologies in ET Docket No. 92-9 which can be allocated to PCS expeditiously, and without the need for negotiation with foreign administrations. Indeed, even if the Commission were to decline to allocate the frequencies proposed by TRW, other "emerging technologies" spectrum may also be available for re-allocation without negative impact on development of either PCS or the nascent international MSS industry.

Compare MCI Opposition at 6; Motorola Inc. Petition for Reconsideration and Clarification at 16 (December 8, 1993) (recognizing the need for additional MSS spectrum, but holding out hope that it can be found "outside the PCS bands").

Conclusion

For these reasons, TRW respectfully requests that the Commission adopt TRW's effectively unopposed request to allot the 2110-2130 MHz frequency bands to broadband PCS. Such action will permit the Commission to move forward expeditiously to allocate the 1970-2010 MHz and 2160-2200 MHz to MSS, as proposed by TRW in its Petition for Rule Making, filed December 8, 1993, while at the same time providing the full amount of spectrum necessary to implement PCS domestically.

Respectfully submitted,

TRW Inc.

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January 13, 1994

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CERTIFICATE OF SERVICE

I, Kaigh K. Johnson, do hereby certify that on this

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